

**ARCH 303 – Principles of Spatial Design I**

**Units: 4**

**Spring 2018—Mondays and Wednesdays—10am-12pm**

**Prerequisite:** ARCH 203 Visualizing and Experiencing the Built Environment

**Location:** AHF 145d on Monday and HAR 115 on Wednesday

To further facilitate learning, this course utilizes Blackboard.

Log in using your USC username and password at:

<https://blackboard.usc.edu/>

**Instructor: Lauren Matchison**

**Office:** Watt Hall

**Office Hours:** Afternoons on MWF, by appointment

**Contact Info:** [lmatchis@usc.edu](mailto:lmatchis@usc.edu)

Students are encouraged to contact me outside of class. Please do so at [lmatchis@usc.edu](mailto:lmatchis@usc.edu); I will respond within 48 hours.

## Course Description

Following the introduction to various visualization practices used to understand the urban form and activities as explored in Arch 203; Arch 303, Principles of Spatial Design, explores a set of fundamental concepts underlying both architecture and urban design. This course introduces design principles and processes through a sequence of exercises that emphasize the development of basic skills, ideas, and techniques used in the creation of simplified architecture and urban design projects.

The course begins by analyzing an existing building on campus, to understand basic ideas such as figure versus field, the relationship of part to the whole, the creation of sequence and place, the distinction between scale versus size, and the way that basic spatial typologies and other organizational ideas can help clarify ideas and programmatic needs in architectural form.

As the semester progresses, students gain fluency in architectural design and thinking, and work in small groups to develop a deeper visual and analytical acumen. Throughout the semester, students will work to improve their methods of visual and verbal communication.

## Learning Objectives

1. Apply a working vocabulary of design methodology (including ideas of abstraction, concept, reiteration and synthesis) to contemporary and historical architecture projects.
2. Analyze existing diagrams, architectural plans and sections, physical models, and architectural writing.
3. Express ideas visually through sketches, diagrams, architectural drawings and models in the pursuit of improved methods of design communication.
4. Explain the importance of architectural precedents and their relationship to contemporary design practice.

## Course Notes

Lecture slides and other class information will be posted on Blackboard.

## Required Readings and Supplementary Materials

Required readings will be assigned and discussed throughout the semester. The following three texts are required:

Ching F D K (2014) *Form, Space and Order* (Fourth Edition). New York, John Wiley.

Calvino Italo (1978) *Invisible Cities*. Orlando, Harcourt.

Readings not found in the course textbook will be posted to USC Blackboard or handed out in class. (<https://blackboard.usc.edu/>)

## Recommended Texts

Ching F D K (2009) *Architectural Graphics* (Fifth Edition). New York, John Wiley.

Clark, Roger and Michael Pause (2005) *Precedents in Architecture: Analytic Diagrams, Formative Ideas, and Parts* (Third Edition). New York, John Wiley.

Edwards Betty (2012) *Drawing on the Right Side of the Brain* (Fourth Edition). New York, Penguin.

Ponsi Andrea (2015) *Analogy and Design*. Charlottesville, University of Virginia Press.

Ponsi Andrea (2011) *Florence: A Map of Perceptions*. Charlottesville, University of Virginia Press.

Tufte Edward (1990) *Envisioning Information*. Cheshire, Graphics Press.

Unwin Simon (2009) *Analysing Architecture* (Third Edition). New York, Routledge.

## Required Software

All students should have access to the Adobe Photoshop, Illustrator and InDesign and Behance.org. There are several ways to do this, including free trials, purchasing the software at a student discount, using the software in USC computer labs, etc. We will discuss the best method for each student as the course progresses.

### Adobe Creative Cloud

If you would like to purchase the suite, the cost for students is \$19.99/month. Use this website and purchase the "Complete Plan." <https://creative.adobe.com/plans>

## Required Supplies (partial list, other supplies may be needed as the semester progresses)

Paper	Pad of 9 x 12 tracing paper Pad of 8.5 x 11 grid paper Sketchbook (6" x 9" gridded moleskin)
Pen/Pencil	Pentel Sign pen or Papermate Flair pen (black) Set of 3, 4, or 6 Pigma Micron pens (various sizes, black and one red) Soft lead pencils (HB and 4B) Hard lead pencils (2H and 4H) Colored pencils

Misc.                    Hard drawing surface  
                             Pencil sharpener  
                             Eraser  
                             Access to digital camera (phone camera is ok)

## **Description and Assessment of Assignments**

*Detailed information will be distributed for each of the following assessments. What follows below is a brief summary of the assessment's intent.*

### **Project 1: Understanding Organizational Systems and Diagramming – a Visual Analysis**

Focus on organizing principles of design, design concepts, hand drawing skills, figure field, diagrams, understanding and making technical architectural drawings, architectural design process

### **Project 2: Understanding Place through Experience and Analysis**

Focus on understanding relationship and experience in a place, analyzing space to find underlying embedded design concepts and organizing principles

### **Project 3: Map of Perceptions**

Focus on design and analogy as tool of discovery and creation at the scale of the campus or small city

### Sketchbook 20%

This is meant to be a thorough and well-organized record of and instrument for critical inquiry and design process. The sketchbook is to include (freehand and/or digitally produced) generative diagrams and design sketches, weekly process drawings, Calvino drawings, notes/diagrams/sketches from class work, graphic analysis of relevant precedents, class/lecture/reading notes, as well as any other material relevant to visual exploration in this course. Date and label all entries clearly and in a consistent manner.

### Digital Portfolio 10%

Due at the end of the semester, on the day and time of our scheduled final exam (no exceptions-failure to submit is equivalent to failing a final exam). All assignments must be represented in the portfolio; students are advised to regularly document all work. Each of you will create a digital portfolio using Adobe's Behance.org

### Participation and Contribution 10%

As this is a design seminar course, students must be prepared to engage and participate each time we meet. We will spend a significant amount of time discussing readings and projects, commenting on student work, and working on project iterations. Each of these components is very interactive and high-level engagement is expected.

## **Evaluation and Grading**

Design Projects 60% (3 projects at 20% each)

Digital Portfolio 10%

Sketchbook with Process Work and Reading Notes 20%

Class Contribution and Participation 10%

Work will be evaluated periodically so that you have an indication of your progress. Unsatisfactory performance warnings will be issued to students whose work does not meet minimum requirements. A minimum grade of 'C' is required to continue on to ARCH 403. Consult University polices for IN (incomplete) grades and deadlines for withdrawal ('W' grade).

## Course Policies

### **School of Architecture Attendance Policy**

A student may miss the equivalent of one week of class sessions (in this case, **two excused** absences are permitted) without directly affecting the student's grade and ability to complete the course. An excused absence is a confirmed personal illness, family emergency, or religious holiday. For each absence over the allowed number, your grade can be lowered by 1/3-letter grade. If additional absences are required for a personal illness, family emergency, pre-approved academic reason/religious observance, you must discuss the situation with your faculty member immediately.

Any student not in class within the first 10 minutes is considered tardy, and any student absent (in any form including sleep, technological distraction, or by leaving mid class for a long bathroom/water break) for more than 1/3 of the class time can be considered fully absent. If arriving late, a student must be respectful of a class in session and do everything possible to minimize the disruption caused by a late arrival. It is always the student's responsibility to seek means (if possible) to make up work missed due to absences, not the instructor's, although such recourse is not always an option due to the nature of the material covered.

### **Statement for Students with Disabilities**

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to your faculty member as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

### **Statement on Academic Integrity *Plagiarism is grounds for failing this course***

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. *Scampus*, the Student Guidebook, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A: <http://www.usc.edu/dept/publications/SCAMPUS/gov/>. Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <http://www.usc.edu/student-affairs/SJACS/>.

### **Religious Holidays**

The University of Southern California recognizes the diversity of our community and the potential for conflicts involving academic activities and personal religious observation. The University provides a guide to such observances for reference and suggests that any concerns about lack of attendance or inability to participate fully in the course activity be fully aired at the start of the term. As a general principle, students should be excused from class for these events if properly documented and if provisions can be made to accommodate the absence and make up the lost work. Constraints on participation that conflict with adequate participation in the course and cannot be resolved to the satisfaction of the faculty and the student need to be identified prior to the add/drop date for registration. After the add/drop date the University and the School of Architecture shall be the sole arbiter of what constitutes appropriate attendance and participation in a given course.